The Diagnostic Laboratory and the Poultryan

by J. J. Sheldon*

All types of livestock and poultry production have faced increased costs and the need for more and more integration to increase production efficiency. As the poultry industry has integrated and concentrated the poultry population in a limited area, the problems associated with infectious diseases have certainly increased. Even with increasingly better control procedures available to the producer for the various classes of infectious diseases, the problems encountered in control and cost of disease control have not decreased. To minimize the hazard and cost of infectious disease control the poultry producer is continually faced with developing preventive medicine programs that fit his type of production at the least possible cost. Where the diagnostic laboratory plays a part in preventive medicine is a question in some producers' minds. Accurate disease diagnosis is time consuming and expensive but does serve as the only method whereby the producer can maintain accurate information on specific disease problems associated with his type of production and his production unit to constantly re-evaluate his disease control and prevention programs.

The poultry producer faces increasing problems with mixed infection in the flock, antibiotic resistant bacterial infections, strains of coccidia that are difficult to control with most coccidiostats and constant consumer pressure for control of organisms such as, Salmonella sp. which may be present in the consumer poultry products. Because of these problems that every phase of the poultry industry faces, it becomes increasingly important to continuously monitor the potential source of infectious disease agents in a poultry flock and to pinpoint, if possible, the source of the problem and continually re-evaluate control procedures.

The diagnostic laboratory can help the producer sort out problems related to mixed infections where more than one agent is involved. Gross examination, isolation of causative agents, strain identification, serologi-